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Defense Nuclear Weapons School FY 98 Course Catalog

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Welcome

Office of the Commandant

1 August 1997

Defense Nuclear Weapons School Defense Special Weapons Agency Kirtland AFB, NM 87117-5669

Dear Visitor:

The Defense Nuclear Weapons School (DNWS) continues its growth into the 21st century. The DNWS is prepared to meet today's challenges with advances in training technologies and distance learning techniques, additions and expansion to the curriculum, and a dynamic cadre of instructors and program designers.

This catalog presents the DNWS course offerings for FY98. We have three new training courses: *Nuclear Crewmember*, *Nuclear Weapons Effects*, and *Joint Nuclear Operations and Targeting*.

In addition to course content, objectives, and course dates, this catalog contains registration information and maps to acquaint you with the school, Kirtland Air Force Base, and Albuquerque.

The unique capabilities of the DNWS and the various courses provided are designed for your growth and professional enhancement. We hope you find this catalog helpful and informative.

Should your organization require a specific training program the DNWS is capable of providing, please contact our Registrar at the numbers listed in the catalog. We look forward to your visit with us soon.

Susan J. Voveris Lt Col, USAF Commandant

Defense Nuclear Weapons School

Vision

The vision of the Defense Nuclear Weapons School is to create, develop, and implement professional training and education in special weapons competencies for the Department of Defense through alternative and innovative training technologies thus ensuring that warfighter forces are prepared to meet critical national defense challenges of the 21st century.

Mission

The Defense Nuclear Weapons School provides current and relevant education and training vital to sustaining a critical special weapons knowledge-base for Department of Defense, Federal, state, local, and allied country personnel by:

- Providing the Department of Defense, and Federal, state, and local agencies with a national *Center of Excellence* facility for special weapons education and training.
- Developing and implementing a curriculum to support national nuclear capabilities.
- Providing education and training in all aspects of nuclear weapons accident response and site restoration.
- Conducting courses of instruction related to international development of nuclear capabilities and potential use of weapons of mass destruction.
- Delivering special weapons education and training anywhere in the world using a variety of multimedia and distance-learning technologies.
- Incorporating the only radioactive training sites in the Department of Defense into nuclear weapons accident response education and training programs.
- Operating and maintaining the largest and most complete nuclear weapons display area within the Department of Defense.

Nuclear Weapons Orientation Course (NWOC)

Course Number: DNWS-R001



Objectives

Participants will:

- Evaluate the scope of the national nuclear weapons program.
- Explain basic nuclear physics and materials.
- Identify the key elements of nuclear surety.
- Describe the operational and physical characteristics of nuclear weapons.
- Evaluate future development, testing, command and control, and weapons effects on stockpiled nuclear weapons.
- Discuss intelligence estimates and international agreements concerning nuclear weapons.
- Discuss current nuclear weapons issues.

Schedule

1-4 December 1997	11-14 May 1998
23-26 February 1998	10-13 August 1998

Scheduled with the Nuclear Weapons Technical Inspector Course. You may register for either or both courses.

Duration 4 days (32 hours)

Content

- Presents an overview of the U.S. nuclear weapons program:
 - -story and development of nuclear weapons,
 - -management of the U.S. nuclear stockpile, and
 - -issues and challenges now facing this program.
- Includes 20 classes organized into the functional areas of nuclear weapons fundamentals, nuclear weapons effects, nuclear weapons stockpile, and nuclear weapons issues.
- Focuses on the Weapons Display Area where students become familiar with every nuclear weapon system ever stockpiled by the United States.
- Develops the themes of safety, security, operational effectiveness, and counterproliferation concerns.

Format. Instructor presentations, video presentations, and a Weapons Display Area tour.

Faculty. Military subject-matter experts and speakers from various Federal agencies.

Registration

Students. Military (E-5 and above) and civilians (GS-7 and above) assigned to positions that require knowledge of the national nuclear weapons program.

Prerequisites. Requires DoD Secret Clearance with Restricted Data access or DOE Q (Sigmas 1-4) security clearance. Security clearance verification must arrive in the Sample Letter – Security Clearance format provided in this catalog no later than 15 work days prior to the class start date. It may be faxed to the DNWS Registrar at (505) 846-9168 or DSN 246-9168.

Location. Report to the school at 0730 on the class start date.

Commander and Staff Radiological Accident Response (CASRAR) Workshop formerly Flag Officer Nuclear Accident Course (FONAC)

Course Number: DNWS-R002



Objectives

To provide world-wide deployable mobile training designed to promote a fundamental understanding of complex radiological accident response issues and to involve/integrate the Commander's staff. Participants will:

- Describe various potential hazards associated with radiological accidents.
- Characterize the history of radiological accidents and lessons learned.
- Describe DoD radiological accident response capabilities.
- Identify legal issues and problems associated with a radiological accident.
- Describe DOE radiological accident response capabilities.
- Identify hazard assessment information.
- Describe Federal Emergency Management Agency (FEMA) radiological accident response capabilities.
- Identify security issues affecting the Commander's staff.
- Describe state and local radiological accident response capabilities.
- Discuss public affairs issues affecting the Commander's staff.
- Discuss medical issues affecting the Commander's staff.
- Discuss environmental and site remediation issues affecting the Commander's staff.

Schedule

Mobile Training Team ONLY

Upon request by host organization/installation.

Use the MTT request letter format contained in this catalog.

Duration

2 days (16 hours)

Content

- Provides training in the responsibilities involved in a radiological weapons accident response:
 - -lessons learned from past accidents,
 - -Federal, state, and local agencies responsibilities,
 - -key issues specific to radiological accidents,
 - -consolidation of procedural guidance and technical information needed to prepare DoD forces to respond to radiological accidents and to work with other responding agencies.

Format. Instructor presentations, video presentations, adjunct staff presentations, and case studies.

Faculty. Military subject-matter experts and speakers from various Federal agencies.

Registration

Students. Prerequisites and location should be coordinated with DNWS personnel prior to commencement of training.

Appropriate Dress. To be determined by host.

Radiological Accident Command, Control, and Coordination (RAC3) Course formerly Senior Officer Nuclear Accident Course (SONAC)

Course Number: DNWS-R003

Objectives

Participants will:

- Identify various potential hazards associated with radiological accidents.
- Discuss the history of radiological accidents and the lessons learned.
- Identify DoD radiological accident response capabilities.
- Identify legal issues and problems associated with a radiological accident.
- Identify DOE radiological accident response capabilities.
- Identify hazard assessment information.
- Identify FEMA radiological accident response capabilities.
- Identify security issues affecting the Commander's staff.
- Identify state and local radiological accident response capabilities.
- Discuss public affairs issues affecting the Commander's staff.
- Discuss medical issues affecting the Commander's staff.
- Demonstrate the ability to resolve radiological accident scenarios.
- Discuss environmental and site remediation issues affecting the Commander's staff.

Schedule

3-7 November 1997	3-7 August 1998
2-6 March 1998	31 August – 4 September 1998
6-10 April 1998	8-12 December 1998
18-22 May 1998	

Duration

5 days (40 hours)

Content

- Provides training in responsibilities and problem resolutions involved in a radiological weapons accident response.
 - -lessons learned from past accidents.
 - -Federal, state, and local agency responsibilities.
 - -key issues specific to a radiological accident.
 - -culminates in a practical field exercise students encounter realistic situations that occur during a radiological accident response.

Format. Instructor presentations, video presentations, Weapons Display Area tour, radiological accident seminar, field exercise, and case studies.

Faculty. Military subject-matter experts and speakers from various Federal agencies

Registration

Students. Military personnel (E-7 to O-6), Federal employees (GS-9 and above), civilian authorities, and local/state representatives with radiological responsibilities.

Prerequisites. Requires a minimum of a DoD Secret Clearance with Restricted Data Access or DOE Q clearance. Statement of clearance in the Sample Letter – Security Clearance provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168.

Location. Report to the school at 0730 on the class start date.

Appropriate Dress. Duty uniform for military personnel - exception; BDU's or utility uniform for field exercise. Casual wear for civilians.

Radiological Hazards Training Course (RHTC)

formerly Nuclear Hazards Training Course (NHTC)

Course Number: DNWS-R004

Objectives

Participants will:

- Explain the structure of the atom, the types of radiation, and their origin.
- Describe the physical principles of nuclear weapons.
- Identify potential hazards and explain how to protect oneself from hazards present at a radiological accident site.
- Discuss the history of radiological accidents and incidents.
- Describe Federal response plans and capabilities.
- Explain the medical aspects of exposure to radiation.
- Demonstrate the ability to properly don anti-C clothing and set up a contamination control station.
- Demonstrate the proper use of respiratory protection.
- Demonstrate the use of radioactivity monitoring and sampling equipment.
- Explain procedures for handling patients contaminated with radioactivity.
- Describe pre-hospital and hospital response to a radiological accident.

Schedule

	23-26 March 1998	17-20 August 1998
Duration	4 days (32 hours)	

Content

- Provides medical personnel training to be members of a nuclear emergency response team:
 - -medical aspects of radiation,
 - -previous radiological accidents and incidents,
 - -radiation, and
 - -toxicological and explosive hazard familiarization.
- Teaches how to set up a contamination control station and the use of various types of radiation detection equipment.

Format. Instructor presentations, video presentations, a nuclear weapons accident exercise, and a hospital response exercise.

Faculty. DNWS subject-matter experts from various branches of the U.S. military.

Registration

Students. Medical and allied health personnel are the primary audience. However, personnel who may comprise a medical response team or are training for nuclear weapons or radiation accidents may also attend.

Prerequisites. No security clearance requirements. Submit required student information to the DNWS Registrar no later than 15 work days prior to the class start date. It may be faxed to (505) 846-9168 or DSN 246-9168. *Location.* Report to the school at 0730 on the class start date.

Appropriate Dress. BDU's or utility uniform for military personnel. Casual wear for civilians. Bring Physical Training clothes for field exercises. If you wear glasses, bring inserts for the MCU2P series protective mask.

Radiological Emergency Team Operations (RETOPS) Course

formerly Nuclear Emergency Team Operations (NETOPS) Course

Course Number: DNWS-R005

Objectives

Participants will:

- Describe basic nuclear physics, biological effects, and protection from exposure to radiation.
- Identify potential hazards and explain how to protect oneself from these hazards.
- Describe Federal response plans and capabilities.
- Demonstrate the use of radioactivity monitoring instruments.
- Explain dosimetry and the use of a dosimeter.
- Identify principles for collecting airborne radioactivity samples.
- Demonstrate accident patterns and plotting.
- Demonstrate the ability to properly don anti-C clothing and procedures for cleaning, inspecting, and proper wear of respiratory protection.
- Demonstrate the setup and operation of a contamination control station.

Schedule

28 October – 6 November 1997	12-21 May 1998
2-11 December 1997	28 July – 6 August 1998
24 February – 5 March 1998	25 August – 3 September 1998
31 March – 9 April 1998	

Duration

8 days (64 hours)

Content

- Covers the scope of actions required to respond to a radiological accident as a radiological emergency team member.
- Basic physics.
- Accident/incident history.
- Federal response plans and capabilities:

-Effects of radiation -Potential hazards
-Accident patterns and plotting -Respiratory protect

-Accident patterns and plotting
-Radiation detection equipment
-Contamination control station set up & operation

Format. Instructor presentations, video presentations, accident seminar, National Atomic Museum tour, case studies, and field exercises.

Faculty. Subject-matter experts from various branches of the U.S. military.

Registration

Students. Military and civilian personnel currently filling an Explosive Ordnance Disposal, Disaster Preparedness, or other emergency response force positions.

Prerequisites. No medical profiles – the course is physically challenging. No security clearance required.

Students will be afforded an opportunity to tour the Weapons Display Area outside of class. A DoD Secret Clearance with Restricted Data Access or a DOE Q clearance is required for this tour. Security clearance verification in the Sample Letter – Security Clearance format provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168. Bring a pocket calculator.

Location. Report to the school at 0730 on the class start date.

Appropriate Dress. BDU's or utility uniform for military personnel. Casual wear for civilians. Bring Physical Training clothes for field exercises. If you wear glasses, bring inserts for the MCU2P series protective mask.

Joint Nuclear Explosive Ordnance Disposal Course (JNEODC)

Course Number: DNWS-R006

Objectives

Participants will:

- Describe active stockpile weapons and associated delivery systems.
- Identify the number and location of active/inactive stockpile weapons.
- Identify hazardous and classified active/inactive stockpile warhead and bomb components.
- Describe the possible configurations of active stockpile weapons when involved in an accident.
- Describe nonviolent disablement of active stockpile weapons.
- Identify the transportation modes and retirement schedule of inactive stockpile weapons.
- Describe the storage configuration of inactive stockpile weapons.

Schedule

17-21 November 1997	20-24 April 1998
9-13 February 1998	22-26 June 1998

Duration

5 days (40 hours)

Content

- Provides detailed sustainment training for officers and enlisted in nuclear EOD operations to include nuclear weapons, hazards, weapons stockpile safety features and safeguards, and weapons development.
- Emphasizes nuclear weapons design information including nuclear physics, enhanced electrical safety, component subsystems, and identification features.
- Provides detailed component familiarization.
- Covers general foreign systems information.

Format. Instructor presentations, video presentations, weapon cutaways, and a Weapons Display Area tour. *Faculty.* Sandia National Laboratories instructors and military subject-matter experts.

Registration

Students. Military EOD technicians (E-4 and above) currently filling an operational EOD position.

Prerequisites. Requires DoD Secret clearance with Restricted Data access or DOE Q clearance with Sigmas 1-4. Statement of clearance and CNWDI access in the Sample Letter – Security clearance format and Sample Message – Security Clearance format provided in this catalog must be faxed to the locations listed below no later than 15 work days prior to the class start date:

Sandia Nat'l Labs Class Administrator (MS 0643)	FAX: (505) 844-4509
Sandia Nat'l Labs Badge Office (MS 0171)	FAX: (505) 844-4263
Defense Nuclear Weapons School Registrar	FAX: (505) 846-9168 or DSN 246-9168

Location. Report to Sandia National Laboratories, Badge Office, Building 800, Kirtland AFB, at 0715 on class start date. After receiving access badge, go to Building 892, Room 190A for class. *Appropriate Dress.* BDU's or utility uniform for military personnel. Casual wear for civilians.

Nuclear Weapons Technical Inspection Course (NWTIC)

Course Number: DNWS-R008



Objectives

Participants will:

- Describe the nuclear weapons technical inspection process.
- List inspection preparation tips.
- Explain common problem areas.
- Discuss lessons learned from previous inspection processes.
- List the requirements of TP 25-1, <u>DoD Nuclear Weapons Technical Inspection System</u>.
- Describe Defense Nuclear Surety Inspection methods.

Schedule

5 December 1997	15 May 1998
27 February 1998	

Scheduled with the Nuclear Weapons Orientation Course. You may register for either or both courses.

Duration 1 day (8 hours)

Content

- Provides an overview of the nuclear weapons technical inspection process as defined in TP 25-1:
 - -The entire inspection process, from inspection preparation, through inspection conduct to required follow-up actions.
- Covers lessons learned and common problem areas in technical operations, safety, security, and the Personnel Reliability Program.

Format. Instructor presentations.

Faculty. Military subject-matter experts from the FCDSWA Inspections Division.

Registration

Students. Military (E-7 and above) and their civilian equivalents (GS-6 and above).

Prerequisites. None. Student information in Sample Letter – Security Clearance format provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168.

Location. Report to the school at 0730 on the class start date.

Joint DoD/DOE Nuclear Surety Executive Course (JNSEC)

formerly Joint DoD/DOE Safety and Security (S²) Executive Course

Course Number: DNWS-R009

Objectives

Participants will:

- Explain the interaction between the DoD and DOE pertaining to the nation's nuclear weapons stockpile.
- Discuss the evolution of safety, security, and control throughout the history of the nuclear weapons stockpile.
- Review the current status of safety, security, and control issues and initiatives.

Schedule

	15 & 16 September 1998
10-11 March 1998	in the Washington, DC area.
	Call DNWS Registrar for details.

Duration

1½ days (12 hours) at DNWS. 1 day (8 hours) in the DC area.

Content

- Provides an overview of safety, security and control features incorporated into stockpiled nuclear weapons systems.
- Provides a review of nuclear weapons design principles.
- Identifies the composition of the current stockpile.
- Illustrates the evolution of modern safety features as well as use control systems.
- Describes security features of both the nuclear weapons storage systems and the systems used to transport nuclear weapons around the world.
- Concludes with a discussion of current issues that affect the surety of the nuclear stockpile.

Format. Instructor presentations. (Weapons Display Area and other tours when conducted at DNWS.) *Faculty.* Military subject-matter experts and speakers from various Federal agencies.

Registration

Students. Senior military or civilian personnel who have nuclear weapons responsibilities.

Prerequisites. Requires DoD Secret Clearance with CNWDI access or DOE Q (Sigmas 1-4) security clearance. Security clearance and CNWDI access verification in the Sample Letter – Security Clearance format provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168. DOE Form 5631.20 is also acceptable.

Location. Report to the school at 0730 on the class start date.

Counterproliferation Awareness Course (CPAC)

Course Number: DNWS-R010



Objectives

Participants will:

- Examine the proliferation history of nuclear, biological, and chemical weapons and their means of delivery (NBC/M).
- Define the framework of the current U.S. counterproliferation policy.
- Define the role of the DoD in countering proliferation and planning operations.
- Describe nuclear warhead designs that are most likely to be used by proliferate nations.
- Describe the physical principles, types and variations, design parameters, effects, and modes of delivery of chemical and biological weapons.
- Identify Third World NBC/M force-building strategies.
- Identify mechanisms used to prevent and contain the spread of NBC/M.
- Identify countries known or suspected to have NBC/M capabilities.
- Identify Third World nations' chemical and biological threat to the U.S.

Schedule

27-30 January 1998	2-5 June 1998
24-27 March 1998	15-18 September 1998

Duration 4 days (32 hours)

Content

- Begins with a historical overview of the proliferation of nuclear, biological, and chemical weapons, and means of delivery (NBC/M), and a discussion of current trends.
- Provides students with an understanding of the threat posed by nations currently possessing or actively seeking a nuclear, biological, and chemical (NBC) weapons capability.
- Ensures that decision makers, action officers, and operators have a common frame of reference when confronting policy and technical military acquisition issues.
- Discusses ballistic and cruise missile programs of other proliferant nations and current efforts to dissuade other nations from acquiring or seeking an NBC/M capability.

Format. Instructor presentations and a Weapons Display Area tour.

Faculty. DNWS instructors from various branches of the U.S. military and subject-matter experts from various Federal agencies.

Registration

Students. Military (E-7 and above) and government civilians (GS-7 and above) with responsibilities related to the proliferation threat and U.S. responses.

Prerequisites. Requires DoD Secret Clearance with Restricted Data access or DOE Q clearance. Security clearance verification in the Sample Letter – Security Clearance format provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168. DOE Form 5631.20 is also acceptable.

Location. Report to the school at 0730 on the class start date.

Nuclear Weapons Effects Course (NWEC)

Course Number: DNWS-R012



Objectives

Participants will:

- Discuss the scope of the national nuclear weapons program.
- Become familiar with the fundamental concepts of nuclear weapons effects.
- Distinguish the essential vocabulary relating to nuclear weapons effects.

Schedule

18-19 November 1997	27-28 May 1998

Duration

1½ days (12 hours)

Content

Presents a basic familiarization in:

Defense Nuclear Weapons School FCDSWA/FCINTR

- The principal effects of nuclear weapons.
- How variations in burst location and yield changes the effect, the equipment damage, and human injury that can result.
- The primary topics include blast, thermal, and radiation effects; electromagnetic pulse and hardening; and the strategic purpose of nuclear weapons.
- The course curriculum is based on unclassified information found in numerous DoD publications and source products as well as information derived from other Federal agencies.

Format. Instructor presentations and a Weapons Display Area tour.

Faculty. Military subject-matter experts from various branches of the services and subject-matter experts from several Federal agencies.

Registration

Students. Unified Combatant Commands, military, civilian, and contractor personnel who require a familiarization with nuclear weapons effects.

Prerequisites. No security clearance required. Submit required student information to the DNWS Registrar no later than 15 work days prior to the class start date. It may be faxed to (505) 846-9168 or DSN 246-9168.

Location. Report to the school at 0730 on the class start date.

Joint Nuclear Operations and Targeting Course (JNOTC)

Course Number: DNWS-R013

Objectives

Participants will:

- Become familiar with basic targeting concepts.
- Explain weapons-target match-up options.
- Describe delivery capabilities and limitations.
- Discuss nuclear effects and desired damage consequences.
- Identify required planning coordination and timelines.
- Evaluate the basic tenets for making informed nuclear weapons employment recommendations to commanders.

Schedule

9-13 February 1998	13-17 July 1998
27-30 April 1998	

Duration

4½ days (36 hours)

Content

Provides training for staff nuclear planners from each of the services for joint operations and targeting:

- Discussions on basic targeting concepts.
- Considerations of the mechanics of targeting.
- Teaches the mechanics of targeteering.
- Provides the staff officer with the knowledge to make informed nuclear weapon employment recommendations based on weapon-target match-up options, delivery capabilities and limitations, nuclear effects and desired damage consequences, and required planning, coordination, and timelines.

Note: Meets U.S. Army qualification requirements for the Additional Skill Identifier 5H.

Format. Instructor presentations.

Defense Nuclear Weapons School FCDSWA/FCINTR

Faculty. Military subject-matter experts and speakers from several Federal agencies.

Registration

Students. Military and civilian personnel.

Prerequisites. Requires DoD Secret Clearance with Restricted Data access or DOE Q clearance. Security clearance verification in the Sample Letter – Security Clearance format provided in this catalog must arrive no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168. DOE Form 5631-20 is also acceptable.

Location. Report to the school at 0730 on the class start date.

Nuclear Crewmember Course (NCC)

Course Number: DNWS-R014



Objectives

Participants will:

- Discuss key principles concerning the U.S. nuclear weapons program.
- Describe how international events impact the nuclear program.
- Identify how the nuclear stockpile affects issues and challenges of the U.S. nuclear weapons program.
- Explain the Nuclear Weapons Technical Inspections.

Schedule

Mobile Training Team ONLY

Upon request by host organization/installation.

Use the MTT request letter format contained in this catalog.

Duration ½ to 1½ days (4 - 12 hours)

Content

Provides training for air and missile crews with a nuclear mission and includes:

- Overview of the U.S. nuclear weapons program.
- Brief historical perspective of nuclear weapons development.
- Management of the nuclear stockpile.
- Issues and challenges facing the program today.
- Prevention of proliferation of nuclear weapons through international agreements.
- Basic nuclear weapons effects and maintaining nuclear weapon surety.
- Nuclear Weapons Technical Inspections.

Format. Instructor presentations.

Faculty. Military subject-matter experts from various branches of the services and speakers from several Federal agencies.

Registration

Students. Air and missile crews with a nuclear mission.

Prerequisites. Assignment to a nuclear-capable unit. Submit student information in the Sample Letter – Security Clearance format provided in this catalog no later than 15 work days prior to the class start date. It may be faxed to the Registrar at (505) 846-9168 or DSN 246-9168.

Location. To be determined by host.

Appropriate Dress. To be determined by host.

Radiological Emergency Team Orientation (RETOR) Course

Course Number: DNWS-NR004



Objectives

To provide worldwide deployable mobile training tailored to specific organization/installation radiological emergency response needs. The course curriculum will be determined jointly by the host and DNWS personnel and may include some or all of the following objectives:

- Describe basic nuclear physics, biological effects, and protection from exposure to radiation.
- Identify potential hazards and explain how to protect oneself from these hazards.
- Describe Federal response plans and capabilities.
- Demonstrate the use of radioactivity monitoring instruments.
- Explain dosimetry and the use of a dosimeter.
- Identify principles for collecting airborne radioactivity samples.
- Demonstrate accident patterns and plotting.
- Demonstrate the ability to properly don anti-C clothing and procedures for cleaning, inspecting, and proper wear of respiratory protection.
- Demonstrate the setup and operation of a contamination control station.

Schedule

Mobile Training Team ONLY.

Upon request by host organization/installation.
Use the MTT request letter format contained in this catalog.

Duration

3 to 5 days (24 to 40 hours)

Content

- Based on the dependent host needs and desires, this program may cover the full spectrum of actions required to respond to a radiological accident as a radiological emergency team member, to include:
 - -Basic physics.
 - -Accident/incident history.
 - -Federal response plans and capabilities.
 - -Effects of radiation.
 - -Potential hazards.
 - -Accident patterns and plotting.
 - -Respiratory protection.
 - -Radiation detection equipment.
 - -Contamination control station setup and operation.

Format. Instructor presentations, video presentations, accident seminar/simulation, and field exercises.

Faculty. DNWS subject-matter experts from various branches of the U.S. military.

Registration

Students. Prerequisites and location should be coordinated with DNWS personnel prior to commencement of training. *Appropriate Dress.* To be determined by host.

Medical Effects of Ionizing Radiation (MEIR) Course

Course Number: DNWS-NR015



Objectives

Participants will:

- Illustrate the process by which radiation interacts with matter.
- Describe the energies released by ionizing radiation sources and their effects on biological systems.
- Explain the characteristics of fallout and what hazards it presents.
- Examine the methods for removal of internally deposited radioactive materials in the body.
- Detail the effects of how blast and thermal energy release affects equipment, structures, and biological systems.
- Discuss the underlying causes of radiation sickness and determine appropriate treatment strategies.
- Describe long-term, low-level, and chronic high-dose sublethal exposures of ionizing radiation.
- Discuss medical implications of combined injury (i.e., radiation combined with other battlefield injuries).
- Explain principles and procedures for pharmacological protection against expected radiation hazards.
- Discuss documentary evidence of effects of high levels of radiation exposure both locally and systemically in accidental human radiation exposures.

Schedule

24-27 August 1998

Duration

1 to 4 days (8 to 32 hours)

Content

- Provides medical personnel with background material relating to human injury and combat effectiveness in a nuclear weapons detonation or accident scenario.
- Introduces physical principles of nuclear weapons and ionizing radiation, including external and internal contamination.

Format. Instructor presentations, video presentations, and decontamination and triage exercises.

Faculty. Military and civilian subject-matter experts.

Registration

Students. Military health care providers and operational planners are the target audience. However, other medical personnel may also attend.

Prerequisites. No security clearance requirements. Contact Military Medical Operations Office at the Forces Radiobiology Research Institute at (301) 295-0316 or DSN 295-0316 to register.

Location. Report to Armed Forces Radiobiology Research Institute security desk at 0745 on the class start date.

Enrollment Information

Course Quota Allocations

Student quotas for DNWS courses are assigned to organizations based on fiscal year requirements provided by the users. A single point of contact at each organization controls quotas—contact your organization's quota manager.

Organizational Quota Managers

Service	Point of Contact	DSN Number	Comm. Number
ACDA		294-1192	(202) 647-1192
Air Force	Contact your Unit Training Manager		
Army	PERSCOM, Enlisted Officers Civilians/TRADOC HQ DA HQ AMC MICOM	221-4592 221-3159 680-3001 227-9442 284-9573	(804) 727-3001 (703) 697-9442 (703) 274-9573
CIA	MICON	746-8901	(703) 351-2287
DIA		482-2851	(202) 231-2851
DOE			(202) 426-1534
FBI	NSDTU		(202) 324-4713
GAO			(505) 845-6699
HQ DSWA		221-7750	(703) 325-7750
JSOC		236-0275	(910) 396-0275
Marine Corps	MCCDC	278-3071	(703) 640-3071
Navy	CNET	922-3684	(904) 452-3684
NSA		644-0111 ext. 6785	(410) 859-6785
OSD		327-3425	(703) 607-3425
OSIA		364-4725	(703) 810-4725

Registration Procedures

- 1. Contact your organization's quota manager to obtain a quota for a DNWS course.
- After obtaining a quota, send the visit request and appropriate security clearance and access verification data to FCDSWA/FCINTR. Security clearance information may be faxed to the DNWS Registrar at (505) 846-9168 or DSN 246-9168. Security clearance and access verification must arrive 15 work days prior to the class start date.
 - Use the Sample Letter Security Clearance format provided in this catalog for security clearance verification.
 - DOE access approval is needed for two courses: Commander and Staff Radiological Accident Response (CASRAR) Workshop (DNWS-R002) (formerly Flag Officer Nuclear Accident Course) and the Joint Nuclear Explosive Ordnance Disposal Course (JNEODC) (DNWS-R006). Course descriptions include specific information on submitting DOE access approval. See DOE Form 5631.20 format provided in this catalog.
 - For more information, contact the Registrar at (505) 846-9168 or DSN 246-9168, or e-mail DNWS@FC.DSWA.MIL.

Loss of Quotas. Failure to provide the required personal/security clearance data will result in the lose of quotas.

Fax Numbers

- 1. Student FAX line and FAX-on-Demand System DSN 246-9168.
- 2. Commercial (505) 846-9168.

Tuition Policy

DNWS is funded by DoD and is available to employees of other Federal agencies and non-Federal government employees. Tuition for FY98 is waived.



Mobile Training Teams

DNWS instructors can provide Mobile Training Team (MTT) versions of courses at your location. The MTT symbol marks available courses. Request an MTT course by completing the Sample Letter – Mobile Training Team Request provided in this catalog. The requesting unit/ organization is responsible for paying travel, lodging, and per diem costs for MTT instructors.

Accommodations

Military or DoD employees can make billeting arrangements by calling Kirtland AFB Billeting at (505) 846-1497, DSN 246-1497, or faxing billeting at (505) 846-4142. All others can request a list of local hotels from the DNWS Registrar. Military personnel 0-6 and above or civilian personnel GS-15 and above, please contact the Kirtland AFB Protocol Office at (505) 846-4119 or DSN 246-4119; fax at DSN 263-0530 or (505) 853-0530 for billeting arrangements.

Entering Kirtland AFB

To obtain a vehicle pass, Kirtland AFB requires a valid driver's license, proof of vehicle insurance, and vehicle registration. A rental vehicle agreement will serve as insurance and registration. While driving on base, observe all speed limits and seat belt requirements.

Sample Letter: Security Clearance

(*Use Your Organization's Letterhead*)

FROM: (Your Organizational Address)

MEMORANDUM FOR FCDSWA/FCINTR (Attn.: Registrar) (Date)

SUBJECT: Visit Request/Security Clearance Verification

- 1. The individual(s) listed below will attend the (*Enter Course Name*) at the Defense Nuclear Weapons School, Kirtland AFB, NM, on (*Enter Course Dates*).
- 2. The following information is provided for use in course registration:
 - a. Name: (Last, First, MI)
 - b. Rank and branch of service:
 - c. SSN:
 - d. Gender:
 - e. Student's duty address:
 - f. Duty title:
 - g. Duty phone:
 - h. FAX number:
 - i. Clearance level:
 - j. Clearance date:
 - k. Authorized Restricted Data or CNWDI Access (indicate access):
 - 1. Access date:
- 3. Questions pertaining to this information should be directed to (name and duty phone number of your organization's point of contact).

(Unit security manager signature block)

Note: When using this letter format for security clearance verification, it must be signed by your unit/organization Security Manager. If you are using unit/organization paperwork to submit security clearance, or the course is unclassified, then it is only necessary for you to fill out Items 1, 2a-h, and 3.

Sample Letter:

Security Clearance Message for the Joint Nuclear EOD Course

121212ZJUL95

Fm (Your Organization)

To Sandia National Laboratories Albuquerque NM//
Departments 14702/MS 0643 and 7437-1/MS 0171//
FCDSWA Kirtland AFB NM //FCINTR//

UNCLAS

Subject: Request for visit

1. The following individual(s) from (your organization) will visit Sandia National Laboratories, Albuquerque, NM and the Defense Nuclear Weapons School, Kirtland AFB NM during the period of (dates) to attend the Joint Nuclear Explosive Ordnance Disposal Course, (course dates):

(full name/rank), US citizen, (SSN), (DOB), (TS or S clearance only/date).

- 2. Individual(s) listed is/are authorized access to restricted data and CNWDI. POC for Sandia Labs is Ralph Carr, 14713, or L. Clayburn, 14702, (505) 844-1172. POC for DNWS is the Registrar's Office, DSN 246-5666, Commercial (505)846-5666.
- 3. This certifies that the person named above needs access in performance of duty and permitting access will not endanger common defense and security. This message signed by (name), (title), for the Commander. (*Insert certifying official taken from DoD Dir 5210.2.*)
- 4. Point of contact at (your organization) is (name), (phone-DSN & commercial).

Sample Security Clearance Message For the Joint Nuclear EOD Course

Sample Letter: Mobile Training Team (MTT) Request

(Fax this letter to the DNWS Registrar)

FROM: (Your organization/office symbol)

SUBJECT: Request for Mobile Training Team (MTT) Visit

TO: FCDSWA/FCINTR 1900 Wyoming Blvd SE Kirtland AFB NM 87117-5669

- 1. Request a Mobile Training Team visit. The following information is provided:
 - a. Course requested (name and course number)
 - b. Organization requesting course (*location and organizational mission*)
 - c. Expected audience (numbers and background of audience)
 - d. Requested time period (provide all available options)
 - e. Organizational equipment available to support training
 - f. Any other pertinent information to assist in the training
- 2. I understand that my organization will be responsible for ensuring all personnel have the proper security clearance/access for the course. A consolidated list of students to include full name, rank or grade, SSN, and security clearance will be provided to instructors before the course begins. I also understand that approval of this request is based on DNWS course/duty schedules and that all expenses incurred during this MTT, including travel-related costs, are the responsibility of my organization.
- 3. The point of contact (POC) for this request is (name/duty phone). Please coordinate as necessary.

(Requesting Official)

DOE F 5631.20

U.S. DEPARTMENT OF ENERGY

OMB Control

(FORMERLY DP-277)				R ACCESS APPROVAL ERMANENT PERSONNEL ASSIGN	MENTS.)		No. 1910-1800
То:			PART	"A" Date:			
10.				Prepared By:			
From:				Symbol:			
				Telephone NoCom	mercial:		
				,			
It is requested that the following person(s) be granted vis			1	ı	I	FTS:	
LAST NAME, FIRST, MIDDLE INITIAL	CHE		DATE OF	ORGANIZATION	TYPE	CLEARANCE	DATE OF
AND SOCIAL SECURITY NUMBER	U.S. CITIZEN	ALIEN	BIRTH		CLEARANCE	NO.	CLEARANCE
NAME OF FACILITY TO BE VISITED			<u> </u>	FOR THE INCLUSIVE DATES	DOE SECURITY C	FFICIAL VERIFYING	DOE CLEARANCE
FOR THE PURPOSE OF:							
TO CONFER WITH THE FOLLOWING PERSON(S):							
SPECIFIC INFORMATION TO WHICH ACCESS IS REQ	UESTED				ACCESS REQUE		
					OTHER CLASSIFI		
PRIOR ARRANGEMENTS HAVE/HAVE NOT BEEN MA	DE AS FOLLOW	VS:					
	CERTIFICA	TION F	OR PERSONNI	EL HAVING DOD CLEARA	NCE		
This certifies that the person(s) named above need						anger the common	defense and
security.							
				Authorized access to	Critical Nuclear W	eapon	
				Design Information with DoD Directive			
				with Dob Directiv	C 3210.2 🗀 1 Cs	140	
Name and Title, Requesting DoD Official							
Traine and True, requesting Dob Official							
Title, Authorizing DoD Official					Signature		
(See DoD Directive 5210.2 and 5210.8)	OED TIPLO A	TION	OD DEDGONA		80-150; OPNAV	5510.3F; AFR 205	-1)
This certifies that the person(s) named above need				EL HAVING DOE CLEARA '.	ANCE		
1		•	,				
Title				Requesting	DOE or Other Go	vernment Agencies	
			PART '	'B"			
Approval is granted with limitations indicated be	low:						
				Mana	ager of Operations/	or Headquarters D	ivision Director
					-	-	

DOE F 5631.20 (2-87) (FORMERLY DP-277)

(Completed Example for JNEODC) U.S. DEPARTMENT OF ENERGY REQUEST FOR VISIT OR ACCESS APPROVAL (NOT TO BE USED FOR TEMPORARY OR PERMANENT PERSONNEL ASSIGNMENTS.)

OMB Control No. 1910-1800

PART "A"

To: Sandia National Laboratories, Attn: Visitor Control Org. 7437-1/MS0171 14703/MS0643, P.O. Box 5800, Albuquerque NM 87185

Date: (Self explanatory) Prepared By: (Self explanatory)
Symbol: (Office Symbol)

From: (Student's Organization)				Telephone NoCo		mercial Duty Ph	one Number)
It is requested that the following person(s) be granted visit/ac	ccess appr	oval			FTS: (DS	N Duty Phone N	lumber)
LAST NAME, FIRST, MIDDLE INITIAL AND SOCIAL SECURITY NUMBER	CHECK		DATE OF	ORGANIZATION	TYPE CLEARANCE		DATE OF
	U.S. CITIZEN	ALIEN	- BIRTH		CLEARANCE	NO.	CLEARANCE
DOE, JOHN J., (RANK), (BRANCH OF SERVICE), (SSN)	x		1 JAN 59	(STUDENT'S ORGANIZATION)	TS or S only		1JUL95
NAME OF FACILITY TO BE VISITED SANDIA NATIONAL LABORATORIES, ALBUQUER WEAPONS SCHOOL	QUE AND	D DEFEN:	SE NUCLEAR	FOR THE INCLUSIVE DATES (CLASS DATES)	DOE SECURITY (DEFICIAL VERIFYING	DOE CLEARANCE
FOR THE PURPOSE OF:				(OLAGO DATEG)			
TO ATTEND THE JOINT NUCLEAR EXPLOSIVE OF TO CONFER WITH THE FOLLOWING PERSON(S):							
RALPH CARR/LORRAINE CLAYBURN (DEPT 1470		AND MAJ	BARON (DNWS)		T		
SECRET/RD/CNWDI					OTHER CLASSIFI	ED INFO ⊠ Y	∕ES □ NO
This certifies that the person(s) named above needs the	RTIFICA	ATION F		EL HAVING DOD CLEARA y and that permitting the above a		anger the common	defense and
security.							
JOHN S. SMITH SECURITY MANAGER							
FOR THE COMMANDER							
Name and Title, Requesting DoD Official							
(DoD Directive 5210.2 Authorizing Official)	John S. Smith						
Title, Authorizing DoD Official Signature (See DoD Directive 5210.2 and 5210.8) (See AR 380-150; OPNAV 5510.3F; AFR 205-1)							1)
	RTIFICA	ATION I	OR PERSONN	EL HAVING DOE CLEARA		5510.5F; AFK 205	-1)
This certifies that the person(s) named above needs the				y. 			
Title				Requesting	DOE or Other Gov	vernment Agencies	
Approval is granted with limitations indicated below	:		PART	"B"			
				Mana	ager of Operations/	or Headquarters D	ivision Director

DOE F 5631.20 (2-87) (FORMERLY DP-277)

(Completed Example for CASRAR) U.S. DEPARTMENT OF ENERGY REQUEST FOR VISIT OR ACCESS APPROVAL (NOT TO BE USED FOR TEMPORARY OR PERMANENT PERSONNEL ASSIGNMENTS.) PART "A"

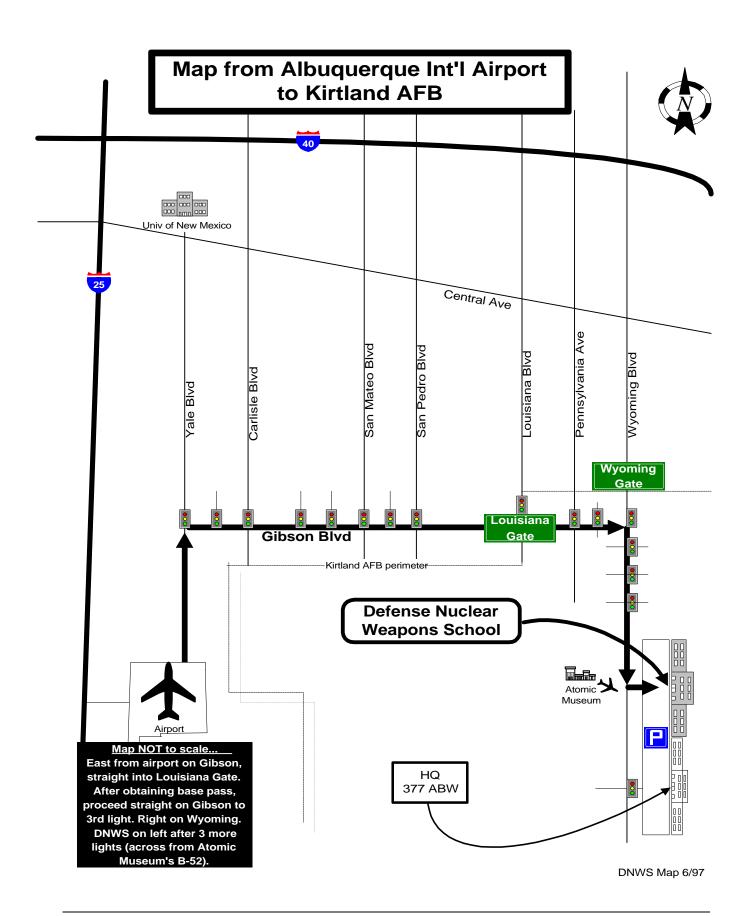
OMB Control No. 1910-1800

To: DOE Albuquerque Field Office, Attn: Visitor Control

P.O. Box 5400, Albuquerque NM 87185

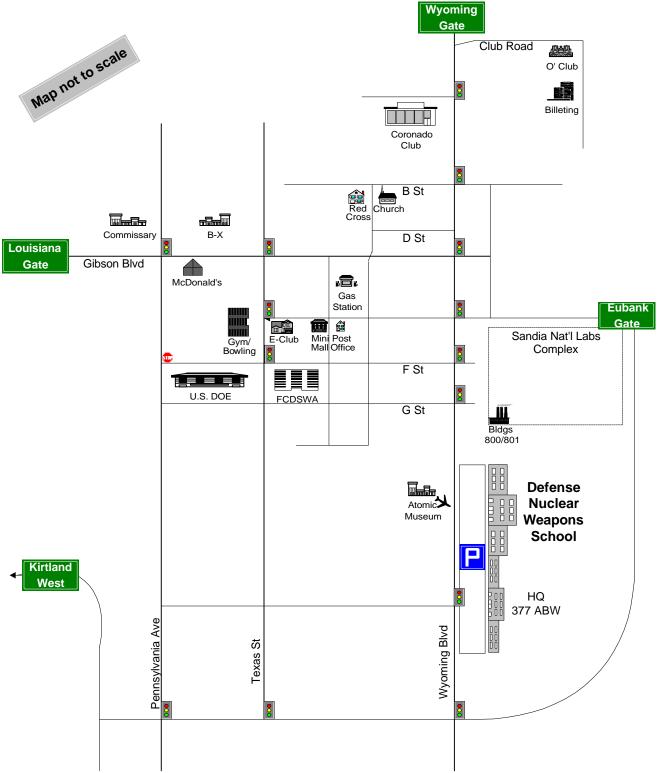
Date: (Self explanatory) Prepared By: (Self explanatory)
Symbol: (Office Symbol)

From: (Student's Organization)				Telephone NoCo	ommercial: (Com	mercial Duty Pl	none Number)	
It is requested that the following person(s) be granted visit/a	ccess appr	oval			FTS: (DS	N Duty Phone N	lumber)	
LAST NAME, FIRST, MIDDLE INITIAL AND SOCIAL SECURITY NUMBER U.S. ALIEN CITIZEN			DATE OF BIRTH	ORGANIZATION	TYPE CLEARANCE	CLEARANCE NO.	DATE OF CLEARANCE	
DOE, JOHN J., (RANK), (BRANCH OF SERVICE), (SSN)	х		1 JAN 59	(STUDENT'S ORGANIZATION)	TS		1JUL95	
NAME OF FACILITY TO BE VISITED DOE/AFO-SST/EOC - DNWS/CASRAR				FOR THE INCLUSIVE DATES	DOE SECURITY (FFICIAL VERIFYING	DOE CLEARANCE	
				(CLASS DATES)				
FOR THE PURPOSE OF:								
DOE BRIEFING AND TOUR OF SECOM FACILITIES	S/SST BF	RIEFING A	AND TOUR/CASE	RAR BRIEFINGS AND WDA TO	UR			
TO CONFER WITH THE FOLLOWING PERSON(S):								
STEVE CHAPMAN OR JEFF STICKNEY (DOE/AFC) AND M	SGT MAF	RR (DNWS)					
SPECIFIC INFORMATION TO WHICH ACCESS IS REQUES	TED				ACCESS REQUE RESTRICTED DA		YES 🗆 NO	
SECRET/RD								
PRIOR ARRANGEMENTS HAVE/HAVE NOT BEEN MADE	AS FOLLO	WS:			l			
STUDENT AT DNWS CASRAR								
CE This certifies that the person(s) named above needs t security.				EL HAVING DOD CLEARA y and that permitting the above a		anger the common	defense and	
JOHN S. SMITH SECURITY MANAGER				Authorized access to O Design Information with DoD Directi	Critical Nuclear Won (CNWDI) in According Yes	ordance		
SECURITY MANAGER				FOR THE CO	OMMANDER			
Name and Title, Requesting DoD Official								
(DoD Directive 5210.2 Authorizing Official)						.		
				John S. Smith				
Title, Authorizing DoD Official Signature (See DoD Directive 5210.2 and 5210.8) (See AR 380-150; OPNAV 5						e 5510.3F; AFR 205	i-1)	
CE				EL HAVING DOE CLEARA		,	/	
This certifies that the person(s) named above needs t	his access	s in the pe	erformance of duty	y.				
Title Requesting DOE or Other Government Agencies					3			
			PART	"B"				
Approval is granted with limitations indicated below	:							
				Manager of Ope	rations/or Headqua	arters Division Dir	ector	
					1			



Map of Kirtland Air Force Base





DNWS Map 2 6/97

Training Needs

Use this form to identify any course of instruction related to nuclear, radiological, biological, or chemical training you may have a need for and can use the Defense Nuclear Weapons School as the vehicle to obtain that training. Fill out this form and return it to the Commandant.

DEFENSE NUCLEAR WEAPONS SCHOOL TRAINING ASSESSMENT AUDIT

Please provide the following information. Be as thorough and complete as possible.						
Name:	Rank:					
Organization:						
Work Phone Number:						
Duty Fax Number:						
Unit E-mail Address:						
Suggested Course Title: Synopsis of Course:						
Why do you believe a need for						
1900 Wyoming	WS@FC.DSWA.MIL ur Weapons School					